October 2003



South Lake De Cade Freshwater Introduction (TE-39)

Project Status

Approved Date: 2000 **Project Area:** 7,343 acres **Approved Funds:** \$495,611 **Total Est. Cost:** \$5.8 M

Net Benefit After 20 Years: 201 acres

Status: Engineering and Design

Project Type: Freshwater Diversion and Shoreline

Protection

Location

The project is located in Terrebonne Parish, approximately 15 miles southwest of Houma, Louisiana.

Problems

The project area is experiencing marsh deterioration due to subsidence, rapid tidal exchange, and human-induced hydrologic changes that result in increased salinities. Saltwater intrusion has caused a shift in marsh type and a conversion of over 30 percent of emergent vegetation to open water habitat. Shoreline erosion along the south embankment of Lake De Cade threatens to breach the hydrologic barrier between the lake and interior marshes.

Restoration Strategy

Proposed project components include installing three control structures along the south rim of the lake and enlarging Lapeyrouse Canal to allow the controlled diversion of Atchafalaya River water, nutrients, and sediments south into project area marshes. Outfall management structures are planned in the marsh interior to provide better distribution of river water. In addition, approximately 1.6 miles of foreshore rock dike is planned to protect the critical areas of the south lake shoreline from breaching.



Lapeyrouse Canal will function as one of three freshwater introduction sites along the south rim of Lake De Cade after obstructions are removed and the canal reinforced.

Progress to Date

After initial engineer investigation the project was divided into two construction units. Construction unit one will consist of the shoreline protection components. The other will be freshwater introduction components. Engineering and design has begun on the shoreline protection components of the project. Data gathering and analysis is being conducted on the freshwater diversion aspects of the project.

This project is on Priority Project List 9.

For more project information, please contact:



Federal Sponsor: Natural Resources Conservation Service Alexandria, LA (318) 473-7756



Local Sponsor: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



Freshwater Introduction South Lake De Cade (TE-39)

Construction Unit 1

Construction Unit 2

Shoreline Protection *

Freshwater Introduction *

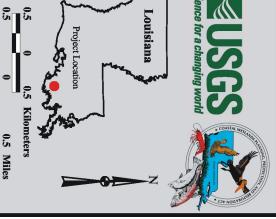
Plug *

Weir *

Dredge Channel * **Containment Dike ***

Project Boundary

* denotes proposed features



Background Imagery: 1998 Digital Orthophoto Quarter Quadrangle Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

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